

	DFS	BFS
Missionaries: path	<p>Solution path:</p> <p>M on left:3 C on left:3 M on right:0 C on right:0 boat is on the left.</p> <p>M on left:2 C on left:2 M on right:1 C on right:1 boat is on the right.</p> <p>M on left:3 C on left:2 M on right:0 C on right:1 boat is on the left.</p> <p>M on left:0 C on left:2 M on right:3 C on right:1 boat is on the right.</p> <p>M on left:2 C on left:2 M on right:1 C on right:1 boat is on the left.</p> <p>M on left:1 C on left:1 M on right:2 C on right:2 boat is on the right.</p>	<p>Solution path:</p> <p>M on left:3 C on left:3 M on right:0 C on right:0 boat is on the left.</p> <p>M on left:2 C on left:2 M on right:1 C on right:1 boat is on the right.</p> <p>M on left:3 C on left:2 M on right:0 C on right:1 boat is on the left.</p> <p>M on left:1 C on left:1 M on right:2 C on right:2 boat is on the right.</p> <p>M on left:3 C on left:1 M on right:0 C on right:2 boat is on the left.</p> <p>M on left:0 C on left:1 M on right:3 C on right:2 boat is on the right.</p>

	<p>M on left:3 C on left:1 M on right:0 C on right:2 boat is on the left.</p> <p>M on left:0 C on left:1 M on right:3 C on right:2 boat is on the right.</p> <p>M on left:1 C on left:1 M on right:2 C on right:2 boat is on the left.</p> <p>M on left:0 C on left:0 M on right:3 C on right:3 boat is on the right.</p>	<p>M on left:1 C on left:1 M on right:2 C on right:2 boat is on the left.</p> <p>M on left:0 C on left:0 M on right:3 C on right:3 boat is on the right.</p> <p>Length of solution path found: 7 edges 10 states expanded. MAX_OPEN_LENGTH = 2</p>
Missionaries: length of the path	9 edges	7 edges
Missionaries: the number of nodes expanded	10 states expanded	10 states expanded
Farmer, Fox, Chicken, and Grain: path	<p>Solution path:</p> <p>Farmer is on left Fox is on left Chicken is on left Grain is on left Boat is on the left.</p> <p>Farmer is on right Fox is on left</p>	<p>Solution path:</p> <p>Farmer is on left Fox is on left Chicken is on left Grain is on left Boat is on the left.</p> <p>Farmer is on right Fox is on left</p>

	<p>Chicken is on right Grain is on left Boat is on the right.</p>	<p>Chicken is on right Grain is on left Boat is on the right.</p>
	<p>Farmer is on left Fox is on left Chicken is on right Grain is on left Boat is on the left.</p>	<p>Farmer is on left Fox is on left Chicken is on right Grain is on left Boat is on the left.</p>
	<p>Farmer is on right Fox is on right Chicken is on right Grain is on left Boat is on the right.</p>	<p>Farmer is on right Fox is on left Chicken is on right Grain is on right Boat is on the right.</p>
	<p>Farmer is on left Fox is on right Chicken is on left Grain is on left Boat is on the left.</p>	<p>Farmer is on left Fox is on left Chicken is on left Grain is on right Boat is on the left.</p>
	<p>Farmer is on right Fox is on right Chicken is on left Grain is on right Boat is on the right.</p>	<p>Farmer is on right Fox is on right Chicken is on left Grain is on right Boat is on the right.</p>
	<p>Farmer is on left Fox is on right Chicken is on left Grain is on right Boat is on the left.</p>	<p>Farmer is on left Fox is on right Chicken is on left Grain is on right Boat is on the left.</p>
	<p>Farmer is on right Fox is on right Chicken is on right Grain is on right</p>	<p>Farmer is on right Fox is on right Chicken is on right Grain is on right</p>

	Boat is on the right.	Boat is on the right.
Farmer, Fox, Chicken, and Grain: length of the path	7 edges	7 edges
Farmer, Fox, Chicken, and Grain: the number of nodes expanded	7 states expanded	9 states expanded
4-Disk Towers of Hanoi: path	Solution path: [[4, 3, 2, 1], [], []] [[4, 3, 2], [1], []] [[4, 3], [1], [2]] [[4, 3, 1], [], [2]] [[4, 3], [], [2, 1]] [[4], [3], [2, 1]] [[4, 1], [3], [2]] [[4], [3, 1], [2]] [[4, 2], [3, 1], []] [[4, 2, 1], [3], []] [[4, 2], [3], [1]] [[4], [3, 2], [1]] [[4, 1], [3, 2], []] [[4], [3, 2, 1], []] [[], [3, 2, 1], [4]] [[1], [3, 2], [4]] [[], [3, 2], [4, 1]] [[2], [3], [4, 1]] [[2, 1], [3], [4]] [[2], [3, 1], [4]] [[], [3, 1], [4, 2]] [[1], [3], [4, 2]] [[], [3], [4, 2, 1]] [[3], [], [4, 2, 1]] [[3, 1], [], [4, 2]] [[3], [1], [4, 2]] [[3, 2], [1], [4]] [[3, 2, 1], [], [4]] [[3, 2], [], [4, 1]] [[3], [2], [4, 1]] [[3, 1], [2], [4]] [[3], [2, 1], [4]] [[], [2, 1], [4, 3]] [[1], [2], [4, 3]] [[], [2], [4, 3, 1]] [[2], [], [4, 3, 1]]	Solution path: [[4, 3, 2, 1], [], []] [[4, 3, 2], [1], []] [[4, 3], [1], [2]] [[4, 3, 1], [], [2]] [[4, 3], [], [2, 1]] [[4], [3], [2, 1]] [[4, 1], [3], [2]] [[4, 1], [3, 2], []] [[4], [3, 2, 1], []] [[], [3, 2, 1], [4]] [[1], [3, 2], [4]] [[], [3, 2], [4, 1]] [[2], [3], [4, 1]] [[2, 1], [3], [4]] [[2, 1], [], [4, 3]] [[2], [1], [4, 3]] [[], [1], [4, 3, 2]] [[1], [], [4, 3, 2]] [[], [], [4, 3, 2, 1]]

	[[2, 1] , [] , [4, 3]] [[2] , [1] , [4, 3]] [[] , [1] , [4, 3, 2]] [[1] , [] , [4, 3, 2]] [[] , [] , [4, 3, 2, 1]]	
4-Disk Towers of Hanoi: length of the path	40 edges	18 edges
4-Disk Towers of Hanoi: the number of nodes expanded	40 states expanded	70 states expanded